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EXAMINER	
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ART UNIT	**PAPER NUMBER**
2187	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/644,139	FISHER ET AL.	
	Examiner	Art Unit	
	Kimberly N. McLean-Mayo	2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 March 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21,23-28 and 30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21,23-28 and 30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 6/4/07
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The enclosed detailed action is in response to the Amendment submitted on March 27, 2007.

Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 4-16, 19, 23-24 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (5,544,304) in view of Meyer et al. PGPUB: US 2002/0188711). Regarding claim 1, Carlson discloses a communication module configured to receive a directive to transition library management functions from a first library manager to a second library manager, wherein the communications module is further configured to communicate with the first library manager, the second library manager, and the host (C 4, L 10-13; the software/hardware in the library system which detects a failure and initiates an error recovery procedure [switchover], the library system communicates with the host via command source, Figures 1 and 3); a control module configured to direct the first library manager to reject data transaction commands while maintaining the storage device in a state responsive to data transactions actions (C 4, L 42-54; C 3, L 30-61; the control module directs the first library manager to go off-line, thereby effectuating the rejection of data transaction commands; the storage device is maintained in a state responsive to data transactions actions via processing of

the data transactions by the second library manager); to suspend the library management function of the first library (C 4, L 44-45) and activate the library management function of the second library manager (C 4, L 42-43). Carlson does not disclose completing previously accepted data transactions commands while rejecting new commands. However, Meyer teaches the concept of completing previously accepted data transactions commands while rejecting new commands [when the failover set transitions to offline, new commands are effectively rejected] (sections 0382-0384). T his feature taught by Meyer provides efficiency by allowing the completion of pending commands without off loading the work to another device. Hence, it would have been obvious to one of ordinary skill in the art to include Meyer's teachings with the system taught by Carlson for the desirable purpose of efficiency.

Regarding claim 4, Carlson discloses the first library manager is configured to store an accepted data transaction command (C 3, L 6-51; C 5, L 39-41).

Regarding claim 5, Carlson discloses the first library manager is configured to execute a previously accepted data transaction command (C 4, L 51-54).

Regarding claim 6, Carlson discloses the control module is configured to terminate the processing of the previously accepted data transaction command (C 4, L 10-13, L 42-45; when the manager/controller fails during processing of a previously accepted command the processing of the command is terminated).

Regarding claim 7, Carlson discloses the control module is configured to transfer accepted data transaction commands from the first library manager to the second library manager (C 4, L 4-6).

Regarding claim 8, Carlson discloses the first library manager is configured to accept a specified data transaction command type (retrieve command; C 4, L 4-6; the commands accepted by the library managers include commands to access the library, i.e. read/write requests).

Regarding claim 9, Carlson discloses the control module is configured to terminate the library manager transition (C 4, L 51-54; when the failed manager/controller is resumed the transition to the second manager is terminated).

Regarding claims 10 and 15, Carlson discloses a storage device responsive to a first library manager and a second library manager, wherein the storage device retrieves and stores data (Figure 3; library); and a transition module configured to receive a directive for a library manager transition; command the first library to reject data transaction commands and maintain the storage device responsive to data transaction commands (C 4, L 42-54; C 3, L 30-61; the control module directs the first library manager to go off-line, thereby effectuating the rejection of data transaction commands; the storage device is maintained in a state responsive to data transactions actions via processing of the data transactions by the second library manager) and command the second library manager to receive data transaction commands [this occurs when the second [standby] manger is activated (C 4, L 42-43). Carlson does not disclose completing previously accepted data transactions commands while rejecting new commands. However,

Meyer teaches the concept of completing previously accepted data transactions commands while rejecting new commands [when the failover set transitions to offline, new commands are effectively rejected] (sections 0382-0384). T his feature taught by Meyer provides efficiency by allowing the completion of pending commands without off loading the work to another device. Hence, it would have been obvious to one of ordinary skill in the art to include Meyer's teachings with the system taught by Carlson for the desirable purpose of efficiency.

Regarding claim 16, Carlson discloses the first library manager is further configured to accept a select data transaction command type during a library manager transition (C 3, L 6-51; C 5, L 39-41).

Regarding claims 12, 19 and 24, Carlson discloses means for managing a data transaction command and completing a data transaction command (C 3, L 32-33; Figure 2, References 12, 14); means for rejecting a data transaction command and maintaining the completing means responsive to data transaction commands (C 4, L 42-54; C 3, L 30-61; the control module directs the first library manager to go off-line, thereby effectuating the rejection of data transaction commands; the storage device is maintained in a state responsive to data transactions actions via processing of the data transactions by the second library manager); means for suspending the library management functions of a first managing means (C 4, L 44-45); and means for activating the library management functions of a second managing means (C 4, L 42-43). Additionally, regarding claim all hardware devices are controlled/managed by software and thus it is evident that Carlson discloses software to effectuate the above features via the hardware.

Carlson does not disclose completing previously accepted data transactions commands while rejecting new commands. However, Meyer teaches the concept of completing previously accepted data transactions commands while rejecting new commands [when the failover set transitions to offline, new commands are effectively rejected] (sections 0382-0384). T his feature taught by Meyer provides efficiency by allowing the completion of pending commands without off loading the work to another device. Hence, it would have been obvious to one of ordinary skill in the art to include Meyer's teachings with the system taught by Carlson for the desirable purpose of efficiency.

Claims 11 and 27 are rejected for the same rationale applied to claim 8 above.

Claims 13 and 24 are rejected for the same rationale applied to claim 4 above.

Claim 14 is rejected for the same rationale applied to claim 5 above.

Claims 23 and 30 are rejected for the same rationale applied to claim 6 above.

4. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (USPN: 5,544,304) in view of Meyer (PGPUB: US 2002/0188711) as applied to claim 1 above and further in view of Carlson PGPUB: US 2003/0217078).

Carlson ('304) and Meyer disclose the limitations cited above, however, Carlson does not disclose a timing module configured to receive a timeout directive and to initiate a timeout period, wherein the control module is configured to suspend the library management function of the first library manager responsive to the completion of the timeout period. Carlson ('078) discloses a timing module configured to receive a timeout directive and to initiate a timeout

period. This features taught by Carlson ('078) provides improved performance by providing maintenance to the system at optimal time. In Carlson's ('304) system, database maintenance is performed only when a failure occurs. However, the system could benefit by performing maintenance at other times, such as when the first library manager is operating slow, etc. Hence, it would have been obvious to one of ordinary skill in the art to include Carlson's ('078) teachings in the system taught by Carlson ('304) and Meyer such that the system includes a timing module configured to receive a timeout directive and to initiate a timeout period, wherein the control module is configured to suspend the library manager of the first library manager responsive to the completion of the timeout period the desirable purpose of improved performance.

5. Claims 17-18, 20-21 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (USPN: 5,544,304) and Meyer (PGPUB; US 2002/0188711) and further in view of in view of Matsunami et al. (USPN: 6,006,308).

Regarding claims 17, 20-21 and 25-26, Carlson and Meyer disclose the limitations cited above, however, Carlson does not disclose notifying a host computer that the library manager transition is in process or that the transition process has completed. Matsunami discloses notifying a host computer that the library manager transition is in process (C 13, L 12-21; when the library controller fails, the host is notified and a transition/substitution is performed, thus whenever a library controller fails, the system begins the transition process and thus is notified of such when a failure occurs) and that the process has completed (C 13, L 12-21; when the substitution is complete, the host is able to determine that the process is complete since the host provides this

information to the RAIL controller). This feature enhances reliability by alerting the host of the status. In Carlson system, if both controllers were to fail, the host would not be informed of such and the system would not be able to recover from such an event. Hence, it would have been obvious to one of ordinary skill in the art to notify the host in the system taught by Carlson and Meyer of a library transition for the desirable purpose of increased reliability.

Regarding claim 18, Carlson and Meyer disclose suspending the library manager transition (Carlson - C 4, L 51-54; when the failed manager/controller is resumed the transition to the second manager is suspended); directing the first library manager to accept data transaction commands (C 4, L 51-54). Carlson does not disclose notifying the host that the first library manager is accepting command data transaction commands. However, Matsunami discloses informing the host of the status of the system (C 13, L 12-21). This feature enhances reliability by alerting the host of the status. Hence, it would have been obvious to one of ordinary skill in the art to notify the host in the system taught by Carlson and Meyer of a library transition for the desirable purpose of increased reliability.

Response to Arguments

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly N. McLean-Mayo whose telephone number is 571-272-4194. The examiner can normally be reached on Monday-Friday (10-6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on 571-272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KIMBERLY [illegible]N-MAYO
PRIMARY EXAMINER

Kimberly N. McLean-Mayo
Primary Examiner
Art Unit 2187

KNM

June 8, 2007